

# EXHIBIT 4

**DECLARATION OF STEVEN F. KAREL**

I, Steven F. Karel, declare as follows:

1. I am the Vice Provost for Research at Brandeis University (“Brandeis”) in Waltham, Massachusetts. I have held that position since September 1, 2021.

2. As Vice Provost for Research, I have personal knowledge of the contents of this declaration, or have knowledge of the matters based on my review of information and records gathered by Brandeis personnel, and could testify thereto.

3. Brandeis receives substantial annual funding from the National Institutes of Health (“NIH”). In the last fiscal year, Brandeis was awarded a total of \$37.4 million from NIH in total costs, of which \$11.0 million were in indirect costs, spread across 90 different awards.

4. The funding Brandeis receives from NIH supports critical and cutting-edge research, which millions of Americans benefit from and depend on. For example:

a. In the area of cancer research, Kaushik Ragunathan’s R35 grant “Capturing the dynamic epigenome using single molecule and single cell approaches” is focused on understanding how the cells in our body remember who they are and what types they are supposed to be. Cancer is a disease of cells forgetting how to be normal. Learning to reverse this process under normal and diseased conditions is critical to developing therapies for cancer and regenerative medicine.

b. In the area of neuroscience, Suzanne Paradis’s R01 grant “Semaphorin-Dependent GABAergic Synapse Formation: A Novel Approach to Increasing Inhibition in the Intact Brain” studies a molecule that suppresses seizures in epilepsy models. They are currently working to translate this finding into a

drug for humans. This drug would have the ability to treat the approximately 1 million Americans whose seizures are not controlled by current available medication.

- c. In the area of chemical biology, Lizbeth Hedstrom's R01 grant "Ubiquitin-independent targeted protein degradation" is creating new strategies for drug design that can be applied to the treatment of cancer, neurodegeneration and infectious diseases. Disruption of the work will delay the development of potentially life-saving therapies.

5. Indirect costs are essential for supporting this research. The NIH's proposal to cut indirect cost rates to 15% would end or seriously jeopardize all of the NIH-funded research projects being conducted at the university.

6. Indirect costs include equipment and facilities, such as: constructing and maintaining state-of-the-art facilities required to meet the current technical requirements of advanced research, as well as the procurement and maintenance of equipment necessary to conduct such research. Without this supporting infrastructure, we cannot conduct the research.

7. For example, with respect to the areas of research described in Paragraph 4:

- a. In the area of Ragunathan's research, flow cytometry and mass photometry are necessary technologies to look at individual cells and size distributions in experiments. Without the indirect costs, we will be unable to continue setting up and supporting this facility.
- b. In the area of Paradis's research, resonant scanning confocal microscopy with environmental incubation is used to allow extremely fast and gentle multiple color imaging while maintaining physiologic environmental conditions. She

also uses the super resolution Stimulated Emission Depletion microscopy to visualize changes at the synapse level. These microscopes are maintained as part of our imaging facility which requires the indirect costs to operate.

- c. In the area of Hedstrom's research, drug development requires specialized equipment such as NMR spectrometers, mass spectrometers, electron microscopes, cell culture facilities and chemical synthesis equipment to synthesize and evaluate drug candidates. Without the indirect costs, Brandeis would be unable to maintain its mass spectrometry facility and to continue to operate its 800 MHz NMR spectrometer.

8. Physical space costs are one of the largest components of indirect costs, and the amount of space available to researchers has a direct and obvious impact on the amount of research that can be done at Brandeis. A significant reduction in funding would likely cause Brandeis to either close facilities or operate at reduced schedules with fewer personnel.

9. In addition, indirect costs fund the administration of awards, including staff who ensure compliance with a vast number of regulatory mandates from agencies such as NIH.<sup>1</sup> These mandates serve many important functions, including protecting human and animal subjects involved in research; ensuring research integrity; properly managing and disposing of chemical and biological agents used in research; preventing financial conflicts of interest; managing funds; preventing intellectual property, technologies, or national security expertise from being inappropriately accessed by foreign adversaries; and providing the high level of cybersecurity, data storage, and computing environments mandated for regulated data.

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<sup>1</sup> <https://grants.nih.gov/grants/policy/nihgps/nihgps.pdf>

10. Recovery of Brandeis's indirect costs is based on predetermined rates that have been contractually negotiated with the federal government.

11. The university has negotiated multiple indirect cost rates with NIH. They are for: Research - on campus, Instruction - on campus, Other Sponsored Activity - on campus, All Programs (mostly research) - off campus. Our rates were entered into in an agreement dated June 2, 2023 and received on June 7, 2023. These rates extend through FY2027. The rates are FY24 - 59.5%, FY 25-26 - 59.5%, and FY27 - 60.5%. The instruction rate is 57.1%, Other Activity is 36.0%, and Off Campus is 26.0% (Administrative cap).

12. The impact of a reduction in the indirect cost rate would be devastating. Of the \$37.4 million in NIH funding that Brandeis received in the last fiscal year, approximately \$21.3 million was allocated for direct costs, \$5.1 million for subcontracts and equipment purchases (which are not eligible for overhead recovery), and \$11.0 million for indirect costs. Similarly, in fiscal year 2025, Brandeis expects to receive \$22 million in NIH funding for direct costs, while \$11 million is allocated for indirect costs. And over the next five years, Brandeis anticipates receiving an average of \$24 million from the NIH for annual direct costs. Based on the predetermined indirect cost rate of 59.5-60.5%, which was agreed upon by the federal government as of June 2, 2023, the University thus expects to receive approximately \$11 million in indirect cost recovery on an annual basis.

13. If—contrary to what Brandeis has negotiated with the federal government—the indirect cost rate is reduced to 15%, that would reduce the University's anticipated annual indirect cost recovery by approximately \$7.5 million.

14. This reduction will have deeply damaging effects on Brandeis's ability to conduct research from day one. It will cause Brandeis to have to immediately consider significantly



reducing research operations, as well as reductions in researchers, research support staff, and administrators who facilitate those research operations.

15. Brandeis has for decades relied on the payment of indirect costs. And until now, we have been able to rely on the well-established process for negotiating indirect cost rates with the government to inform our budgeting and planning. Operating budgets rely on an estimate of both direct and indirect sponsored funding to plan for annual staffing needs (*e.g.*, post-docs, PhD students, and other research staff), infrastructure support (*e.g.*, IT networks, regulatory compliance, and grant management support), and facility and equipment purchases. Brandeis also has long-term obligations—for example, such as tenured faculty salaries and admitted PhD students—and it relies on budgeted grant funding, including associated indirect cost recovery, to fulfill these commitments.

16. In addition to the immediate impacts and reliance interests described above, there are longer term impacts that are both cumulative and cascading. These cuts will cause Brandeis to have to reduce the number of Ph.D. students it admits as well the number of faculty it hires to conduct research. The university's support and safety infrastructure will also be adversely impacted as personnel reductions will have to be made across the research enterprise.

17. Finally, slowdowns or halts in research by Brandeis and other American universities will allow competitor nations that are maintaining their investments in research to surpass the United States on this front, threatening both our Nation's national security and its economic dominance.

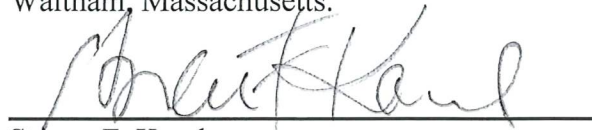
18. Nor can Brandeis cover the funding gap itself. While Brandeis maintains an endowment, it is neither feasible nor sustainable for Brandeis to use endowment funds or other revenue sources to offset shortfalls in indirect cost recovery, for several reasons:

- a. The majority of Brandeis's endowment—around 90%—is restricted to specific donor-designated purposes, such as scholarships, faculty chairs, and academic programs. Brandeis is not legally permitted to use those funds to cover research infrastructure costs.
- b. Even the portion of the endowment that is unrestricted is subject to a carefully managed annual payout, typically around 4.5-5.5%, to ensure long-term financial stability for the institution. Brandeis recently had to increase the amount of its endowment payout to address significant financial challenges and cannot draw further without seriously compromising its financial stability.
- c. As a non-profit institution, Brandeis reinvests nearly all of its revenue into mission-critical activities, leaving little margin to absorb unexpected funding gaps. In other words, unlike for-profit organizations, Brandeis does not generate significant surpluses that could be redirected without impacting core academic priorities such as educational programs and financial aid support for students.

19. Moreover, absorbing the cost of a lower indirect cost rate, even if it were possible, would create long-term budget pressures on Brandeis—which would in turn force reductions in key investments supporting Brandeis's faculty, students, staff, research, and teaching infrastructure, as well as other critical activities needed to maintain Brandeis's academic excellence. Our operations for the past few years have had an operating margin of under 0.5% and the University ran at a slight loss in the most recent fiscal year (FY24). There is no cushion to absorb a reduction in the rate. As it is the university had a reduction in force in the spring of 2024. Further revenue reductions could lead to further pressure on university operations.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 10, 2025 at Brandeis University, 415 South Street,  
Waltham, Massachusetts.

A handwritten signature in dark ink, appearing to read "Steven F. Karel", is written over a horizontal line.

Steven F. Karel  
Vice Provost for Research